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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER				
BENZON, GREG C				
ART UNIT		PAPER NUMBER		
2444				
NOTIFICATION DATE		DELIVERY MODE		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary**Application No.**

09/876,943

Applicant(s)

BERKUN ET AL.

Examiner

GREG BENZON

Art Unit

2444

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SE/C)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 09/10/2009

DETAILED ACTION

This application has been examined. Claims 1-10,12-20 are pending. Claim 11 is cancelled.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/10/2009 has been entered.

Priority

This application claims benefit of priority from provisional application 60/252273 (November 21, 2000) .

The effective date of the subject matter described in the pending claims in this application is November 21,2000.

Response to Arguments

Applicant's arguments filed 09/10/2009 have been fully considered but they are moot in view of the new grounds for rejection.

The Applicant presents the following argument(s) [in italics]:

Because Hoffert does not disclose or suggest that its metadata database contains valid or authoritative metadata, and because Hoffert updates its metadata database with metadata whose accuracy is unknown, applicants submit that Hoffert's metadata database is not an authoritative source.

The Examiner presents prior art by Davis regarding an authoritative source.

Davis disclosed a metadata server (Davis-Column 12 Lines 35-55) for storing metadata and unique reference to the multimedia content, said unique reference being imbedded in the multimedia content. The Davis metadata database is equivalent to an authoritative source because it provides the unique reference in multimedia content, so that whenever the metadata is removed or corrupted, (Davis-Column 15-20) the unique reference may be used to find the correct metadata held by the said metadata server, so that the correct metadata is again imbedded in the multimedia content. In Davis the unique reference requires that those applications seeking the associated metadata go to a specific metadata database as indicated by the unique reference. Thus Srivastava would have been motivated to use Davis's metadata server as an external source for updated media annotations that are not directly extracted from the media file itself because Davis' metadata is tamper-resistant.

The Examiner notes that Davis' metadata is not updated according to changes in the media file which may have been caused by tampering. Furthermore the presence of the tamper-proof unique reference indicates an authoritative source whose accuracy is known.

Thus Srivastava-Davis (re. Claim 1) disclosed an authoritative source whose accuracy is known wherein the authoritative source is a source other than a person, is not said media, and is not said media source from which said metadata was retrieved.

Regarding ground truth databases the Examiner notes that said ground truth databases are user maintained databases as per Applicant Specifications Page 16 Paragraph 42.

Epstein Paragraph 99 disclosed improving the quality and usefulness of the metabase information by providing the user with relevant information about each datum in the metabase. When the user accesses a particular datum, the metabase can provide useful information to the user, such as the status of the datum (e.g., verified, disputed, yet to be disputed) and the overall credibility rating of the datum.

The Examiner notes that matching the datum with the field of metadata from the media is implicit in Epstein. The overall credibility rating by Epstein requires calculation of various ratings and is equivalent to a calculated score on which the datum may be judged as satisfactory.

Thus Epstein disclosed (re. Claim 18,19,20) calculating a score representing a degree of similarity (Epstein-Paragraph 99) between contents of at least one field of

noisy metadata and contents of at least one field of metadata from the authoritative source; comparing the calculated score to a threshold value; and determining whether the authoritative source qualifies as a ground truth database, wherein the authoritative source qualifies as a ground truth database if the calculated score satisfies the threshold value. (Epstein-Paragraph 99)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1-3,5-10, 13-17 rejected under 35 U.S.C. 103(a) as being unpatentable over Srivastava et al. (US Patent 654922) in view of Davis (US Patent 7209571).

With respect to Claim 1, Srivastava discloses a method for enhancing metadata associated with media on a communications network, said method comprising the steps of: parsing said metadata associated with said media into at least one field of metadata; (Column 1 Lines 40-65, Column 2 Lines 40-65) comparing each of said at least one field of metadata with at least one field of metadata from an authoritative source, each field of metadata compared with each field of authoritative metadata being a compared field;

(Column 5 Lines 1-5) and modifying said metadata if said compared field does not match at least one field of authoritative metadata (Column 6 Lines 15-20) wherein code implementing the method is stored in memory of the computing system for execution by a processor of the computing system. (Srivastava-Column 4 Lines 40-45, 'extraction module')

While Srivastava (re. Claim 1) substantially disclosed the claimed invention Srivastava did not disclose an authoritative source whose accuracy is known . Srivastava did not disclose wherein the authoritative source is a source other than a person, is not said media, and is not said media source from which said metadata was retrieved. Srivastava disclosed only querying external sources on the Internet for media annotations but did not explicitly disclose wherein the authoritative source is a source other than a person, is not said media, and is not said media source from which said metadata was retrieved.

Davis disclosed a metadata server database (Davis-Column 12 Lines 35-55) for storing metadata and unique reference to the multimedia content, said unique reference being imbedded in the multimedia content. The Davis metadata database is equivalent to an authoritative source whose accuracy is known because it provides the unique reference in multimedia content, so that whenever the metadata is removed or corrupted, (Davis-Column 15-20) the unique reference may be used to find the correct

metadata held by the said metadata server, so that the correct metadata is again associated with the multimedia content. Thus Srivastava would have been motivated to use Davis's metadata server database as an external source for updated media annotations that are not directly extracted from the media file itself because Davis' metadata is tamper-resistant.

Srivastava and Davis are analogous art because they present concepts and practices regarding extraction, update and management of metadata associated with media files. At the time of the invention it would have been obvious to a person of ordinary skill in the art to incorporate a metadata database for checking the validity of metadata related to a media file as taught by Davis into the method and system described by Srivastava. The motivation for said combination would have been to provide a content signature and encrypted metadata that is tamper resistant. (Davis- Column 20, Lines 35-45)

With respect to Claim 9, the applicant discloses a system with the same limitations described in Claim 1. Claim 9 is therefore rejected on the same basis as Claim 1.

With respect to Claim 10, the applicant discloses a computer readable storage medium with the same limitations described in Claim 1. Claim 10 is therefore rejected on the same basis as Claim 1.

Furthermore Srivastava-Davis discloses (re. Claims 9,10) storing said modified metadata in an index, wherein said index is not said authoritative source, is not said media, and is not said media source from which said metadata was retrieved.
(Srivastava -Column 8 Lines 45-55, '*self-contained repository*')

With respect to Claim 2, Srivastava-Davis discloses a method in accordance with claim 1, wherein said step of modifying said metadata comprise at least one of replacing said compared field with a corresponding field of said authoritative metadata, correcting said compared field in accordance with a corresponding field of said authoritative metadata, and adding at least one field of authoritative metadata to said metadata.
(Srivastava-Column1 Lines 40-65,Column 2 Lines 40-65)

With respect to Claim 3, Srivastava-Davis discloses a method in accordance with claim 1, wherein said authoritative metadata is obtained from at least one of a multimedia file, a streaming media file, a uniform resource indicator (URI), a database, a media file header, a media file footer, a metatag, and a transport stream (Srivastava-Column 3 Lines 1-10 Column 4 Lines 30-60)

With respect to Claim 5, Srivastava-Davis discloses a method in accordance with claim 1, wherein said media comprises at least one of an extension selected from the group consisting of ram, .rm, rpm, .mov, .qif.wma, .cmr, .avi, .swf, .swl .mpg, .mpa, .mp1, .mp2, .mp3, m3a, and .m3u. (Srivastava-Column 1 Lines 20-50 Column 4 Lines 30-60)

With respect to Claim 6, Srivastava-Davis discloses a method in accordance with claim 1, wherein said metadata comprise elements related to at least one of content of the media, intellectual property rights associated with the media, and instantiation of the media.(Srivastava-Column 2 Lines 20-40)

With respect to Claim 7, Srivastava-Davis discloses a method in accordance with claim 1, wherein said media comprises at least one of multimedia and streaming media. (Srivastava-Column 2 Lines 20-40 Column 4 Lines 30-60)

With respect to Claim 8, Srivastava-Davis discloses a method in accordance with claim 1, wherein said communications network is a computer network.(Srivastava-Figure 1)

With respect to Claim 13, Srivastava-Davis discloses wherein said media comprises at least one of an extension selected from the group consisting of .ram, .rm, .rpm, .mov, .qif, .wma, .cmr, .avi, .swf, .swl, .mpg, .mpa, .mp1, .mp2, .mp3, m3a, and .m3u (Srivastava-Column 1 Lines 20-50 Column 4 Lines 30-60)

With respect to Claim 14, Srivastava-Davis discloses wherein said modify metadata code segment performs at least one of replacing said compared field with a corresponding field of said authoritative metadata, (Srivastava -Column 5 Lines 1-5, *'advanced querying'*) correcting said compared field in accordance with a corresponding field of said authoritative metadata, and adding at least one field of authoritative metadata to said metadata. (Srivastava-Column 1 Lines 40-65, Column 2 Lines 40-65, Column 6 Lines 15-20, *'overriding annotations with completely new set'*)

With respect to Claim 15, Srivastava-Davis discloses wherein said authoritative metadata is obtained from at least one of a multimedia file, a streaming media file, a uniform resource indicator (URI), a database, a media file header, a media file footer, a metatag, and a transport stream. (Srivastava-Column 3 Lines 1-10 Column 4 Lines 30-60)

With respect to Claim 16, Srivastava-Davis discloses wherein said metadata comprise elements related to at least one of content of the media, intellectual property rights associated with the media, and instantiation of the media. (Srivastava-Column 2 Lines 20-40, 'copyright notices')

With respect to Claim 17, Srivastava-Davis discloses wherein said media is at least one of streaming media and multimedia files formatted in at least one of a plurality of formats. (Srivastava-Column 1 Lines 40-60, Column 2 Lines 25-40 Column 4 Lines 30-60)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious

at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Srivastava et al. (US Patent 654922) in view of Davis (US Patent 7209571) in view of Epstein (US Publication 2002/0049738).

Srivastava-Davis substantially disclosed the claimed invention as described in the rejection for Claim 1.

However Srivastava-Davis did not disclose (re. Claim 18,19,20) calculating a score representing a degree of similarity between contents of at least one field of noisy metadata and contents of at least one field of metadata from the authoritative source; comparing the calculated score to a threshold value; and determining whether the authoritative source qualifies as a ground truth database, wherein the authoritative source qualifies as a ground truth database if the calculated score satisfies the threshold value.

Epstein Paragraph 99 disclosed improving the quality and usefulness of the metabase information by providing the user with relevant information about each datum in the metabase. When the user accesses a particular datum, the metabase can provide useful information to the user, such as the status of the datum (e.g., verified, disputed, yet to be disputed) and the overall credibility rating of the datum.

The Examiner notes that matching the datum with the field of metadata from the media is implicit in Epstein. The overall credibility rating by Epstein requires calculation of various ratings and is equivalent to a calculated score on which the datum may be judged as satisfactory.

Thus Epstein disclosed (re. Claim 18,19,20) calculating a score representing a degree of similarity (Epstein-Paragraph 99) between contents of at least one field of noisy metadata and contents of at least one field of metadata from the authoritative source; comparing the calculated score to a threshold value; and determining whether the authoritative source qualifies as a ground truth database, wherein the authoritative source qualifies as a ground truth database if the calculated score satisfies the threshold value. (Epstein-Paragraph 99)

Srivastava,Davis and Epstein are analogous art because they present concepts and practices regarding extraction, update and management of metadata associated with media files. At the time of the invention it would have been obvious to a person of ordinary skill in the art to incorporate a credibility rating by Epstein for checking the validity of metadata related to a media file as taught by Epstein into the method and system described by Srivastava-Davis. The motivation for said combination would have been enable users to limit searches to relevant, well-categorized data. (Epstein-Paragraph 10)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said

subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Srivastava et al. (US Patent 654922) in view of Davis (US Patent 7209571) in view of Chu et al. (US Patent 6943720).

Srivastava-Davis substantially disclosed the claimed invention as described in the rejection for Claim 1.

Furthermore with respect to Claims 4 and 12 Srivastava-Davis discloses receiving said metadata and corresponding media files, wherein said corresponding media files are formatted in at least one of a plurality of formats; providing media files formatted in the same format and associated metadata to a corresponding format specific metadata extractor; (Srivastava-Figure 1, Column 2 Lines 40-65, Column 4 Lines 30-60, Column 5 Lines 1-5, Column 6 Lines 15-20)

However, with respect to Claims 4,12 Srivastava-Davis does not disclose determining if a media file is unavailable or corrupt; and if said media file is unavailable or corrupt, performing said step of comparing at a predetermined time in the future.

Chu discloses (re. Claim 4, 12) a method for a metadata synchronizer wherein, at specified intervals, an object is monitored to identify changes to metadata of that object. The method may be used to check if the URL describing the location of a

media file is still working after a certain period of time. (Chu-Abstract, Column 7 Lines 35-65)

Srivastava, Davis and Chu are analogous art because they present concepts and practices regarding extraction, update and management of metadata associated with media files. At the time of the invention it would have been obvious to a person of ordinary skill in the art to incorporate a monitoring schedule for checking the validity of metadata related to a media file as taught by Chu into the method and system described by Srivastava-Davis. The suggested motivation would have been, as Chu suggests, to allow for situations wherein the system enables users to add or modify metadata for objects in a database. Additionally, some systems may store the metadata for the objects in multiple locations. If the metadata stored at one location changes, the metadata stored at other locations is no longer in synch. Monitoring the media files for validity results in timely updates to the metadata for the media files before the users can detect the inconsistencies in the system.

Conclusion

Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part

of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to the enclosed PTO-892 form.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GREG BENGZON whose telephone number is (571)272-3944. The examiner can normally be reached on Mon. thru Fri. 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on (571)272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Greg Bengzon/
Examiner, Art Unit 2444

